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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* EDWARD G. MCLAUGHLIN and FLINT A. LANE

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Appeal 2009-003023  
Application 09/277,189  
Technology Center 3600

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Decided: January 25, 2010

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*Before* HUBERT C. LORIN, JOSEPH A. FISCHETTI, and  
STEPHEN WALSH, *Administrative Patent Judges*.

LORIN, *Administrative Patent Judge*.

DECISION ON APPEAL

## STATEMENT OF THE CASE

Edward G. McLaughlin et al. (Appellants) seek our review under 35 U.S.C. § 134 (2002) of the final rejection of claims 1-30. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

## SUMMARY OF DECISION

We AFFIRM-IN-PART<sup>1</sup> and enter a new grounds of rejection pursuant to 37 C.F.R. § 41.50(b).

## THE INVENTION

This invention is a system that is single source for the presentment and payment of consumer bills. Specification 4:13-14. The system receives bills both electronically and through the postal service. Specification 4:16-17.

Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A method of electronically presenting bills for at least one customer having an account from which funds may be drawn, comprising the steps of:

allowing a customer to subscribe to a bill presentment system for receiving electronic-based and paper-based bills for said customer;

notifying a plurality of billers that said customer has subscribed to said bill presentment

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<sup>1</sup> Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed Sep. 19, 2006) and Reply Brief ("Reply Br.," filed Feb. 28, 2007), and the Examiner's Answer ("Answer," mailed Dec. 28, 2006).

system, said billers including electronic-based billers and paper-based billers;

receiving at least one electronic bill for said customer from at least one of said billers;

receiving at least one paper bill for said customer from at least one of said billers;

identifying the contents of said paper bill;

scanning said at least one paper bill received for said customer to generate electronic image information;

identifying the type of bill;

extracting billing information from said electronic image information, wherein the billing information is extracted using a predefined template;

validating the extracted billing information generated from said scanned paper bill; and

presenting said at least one electronic bill and said extracted billing information representative of said at least one paper bill to said customer.

#### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

5,963,925	Kolling	Oct. 5, 1999
6,097,834	Krouse	Aug. 1, 2000

The following rejection is before us for review:

1. Claims 1-30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kolling and Krouse.

## ARGUMENTS

In rejecting claims 1-30, the Examiner proposed modifying Kolling's electronic statement presentment (ESP) system to allow for the transmission of paper bills *to the ESP system* and then allowing *the ESP system* to convert the paper bills to an electronic format. Answer 6. The Examiner reasoned that some billers are not capable of transmitting their bills electronically. *Id.* The Examiner then applied Krouse to teach a process of converting a paper bill to an electronic format. Answer 6-7.

In response to the Examiner's rejection, the Appellants attack the Examiner's characterization of Kolling and Krouse (App. Br. 16 and 17 and Reply Br. 2-8) and the rationale used in making the proposed modification (App. Br. 18-32 and Reply Br. 8-9). Specifically, the Appellants argue that that the Examiner has used hindsight in finding the claims obvious because the Examiner has provided no teaching, suggestion, or motivation in the either Kolling or Krouse (App. Br. 19-24), the Kolling reference teaches away from the combination (Reply Br. 2 and 10), and the Krouse reference is unrelated to bill presentment (App. Br. 17 and Reply Br. 6-7).

Further, the Appellants argue that even if references were properly combined, the combination does not teach the steps of:

- i) receiving at least one paper bill for a customer from a biller (App. Br. 27-28),
- ii) scanning a paper bill to generate electronic image information (App. Br. 29-30),

iii) extracting billing information from said electronic image information, wherein the billing information is extracted using a predefined template (App. Br. 24-26) and

iv) validating the billing information extracted from the scanned paper bill. App. Br. 30-31.

### ISSUE

The issue is whether the Appellants have shown that the Examiner erred in rejecting claims 1-30 under 35 U.S.C. §103(a) as unpatentable over Kolling and Krouse. Specifically, the issue is whether one of ordinary skill in the art would have been led to make the bill payment system of Krouse with the bill payment system of the combined bill presentment and bill payment system of Kolling.

### FINDINGS OF FACT

We find that the following enumerated findings of fact (FF) are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

#### *The scope and content of the prior art*

##### Kolling

1. Kolling invention is an electronic statement presentment system that is used in conjunction with an existing electronic bill payment system. Col. 4, ll. 30-41 and col. 6, ll. 25-30.

2. Kolling states, “[a]n electronic statement presentment (ESP) system replaces the preparation and mailing of paper statements and invoices from a biller with electronic delivery.” Abstract, ll. 1-3.
3. Kolling states “[w]hereas billers currently use an invoicing system to print statements on paper for mailing, the present invention is able to retrieve electronic statement data from invoicing system 204 for eventual generation of an electronic statement.” Col. 9, ll. 34-38.
4. Kolling describes the biller invoicing system 204 as any existing legacy system that a biller currently uses to send statements to a customer. Col. 9, ll. 32-34.
5. Kolling describes a statement generation workstation 222 that uses the electronic statement data and a template to generate an electronic statement which is then delivered to the customer. Col. 13, ll. 13-18.
6. Kolling states “[t]he present invention replaces the printing, stuffing and mailing of paper statements with the power and efficiency of electronic delivery.” Col. 4, ll. 16-18.
7. However, Kolling also describes a biller using the system “for those customers that wish electronic statements.” Col. 5, ll. 30-32. *See also* col. 5, ll. 13-16.
8. Kolling states that “[t]he consumer financial institutions could print and deliver the statement if it wished.” Col. 5, ll. 52-53.

Krouse

9. Krouse describes a financial transaction processing system where documents containing financial transaction-related information are optically scanned to generate an image of the document so that information can be extracted to process the transaction. Col. 1, ll.
10. Krouse describes a bill payment terminal 202 for use by a human operator for processing a bill document. Col. 12, ll. 23-28.
11. Krouse describes a customer scanning a bill document with a scanner. Col. 12, ll. 38-45.
12. Krouse describes transmitting the scanned image of the bill document to an image characterization generator 204, which then processes the image to determine recognition characteristics for the bill. Col. 13, ll. 5-11.
13. Krouse describes that the process of determining recognition characteristics for the bill includes generating rectangles around areas of dark pixels on the can image and determining the coordinates of predetermined vertexes of these rectangles and the dimensions of these rectangles. Col. 13, l. 60 - col. 14, l. 10.
14. Krouse describes using the vertex coordinates and dimensions as recognition characteristics for the scanned image. Col. 14, ll. 10-16.
15. Krouse describes matching the recognition characteristics of the scanned image to reference recognition characteristics of a reference document. Col. 14, ll. 17-26 and col. 14, l. 64-col. 15, l. 10.



16. Krouse describes using billing document format information of the reference document to extract numerical data from the scanned image. Col. 16, ll. 43-59.
17. Krouse describes displaying the extracted numerical data and archived data about the payee to customer and asking a customer to indicate whether this information is correct. Col. 16, 1.60 - col. 17, 1. 3.

*Any differences between the claimed subject matter and the prior art*

18. Kolling does not describe identifying the content of the paper bill, scanning the paper bill to generate electronic image information, extracting billing information from the electronic image information using a template, validating the extracted billing information, and presenting the extracted billing information to the customer.

*The level of skill in the art*

19. Neither the Examiner nor the Appellants have addressed the level of ordinary skill in the pertinent art of bill presentment and payment. We will therefore consider the cited prior art as representative of the level of ordinary skill in the art. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he absence of specific findings on the level of skill in the art does not give rise to reversible error ‘where the prior art itself reflects an appropriate level and a need for testimony is not shown’”)

(Quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 163 (Fed. Cir. 1985)).

*Secondary considerations*

20. There is no evidence on record of secondary considerations of non-obviousness for our consideration.

PRINCIPLES OF LAW

*Definiteness*

The test for compliance is whether the claims set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the application disclosure as they would be interpreted by one of ordinary skill in the art. *In re Moore*, 439 F.2d 1232, 1235 (CCPA 1971).

*Obviousness*

Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

*KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). *See also*

*KSR*, 550 U.S. at 407 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”) The Court in *Graham* further noted that evidence of secondary considerations “might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.” *Graham*, 383 U.S. at 17-18.

### ANALYSIS

*The rejection of claims 1-30 under §103(a) as being unpatentable over Kolling and Krouse.*

#### *Claims 1-8*

The Appellants argue claims 1-8 as a group (App. Br. 14). We select claim 1 as the representative claim for this group, and the remaining claims 2-8 stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii) (2009).

We find that one of ordinary skill in the art would have been led by Kolling and Krouse to the method of claim 1. However, our reasoning below differs from that of the Examiner. The Examiner proposed modifying the electronic statement presentment (ESP) system of Kolling to accept and process paper bills (Answer 6), while our analysis focuses on making the “existing bill payment system” of Kolling (FF 1) the bill payment system disclosed in Krouse. Therefore, we designate our rationale as a new ground of rejection.

First, we note that claim 1 does not require that *the bill presentment system* receives the paper bill from the biller, as in the Examiner’s proposed combination. See Answer 5-6. Claim 1 is silent as to who receives the bill

and is silent as to who performs the remaining steps involving the paper bill or information extracted from the bill. Further, claim 1 includes the open transition “comprising” and therefore does not preclude other elements than those recited. These steps are not limited to being performed by the bill presentment system, but could be performed by a customer or bill payment system.

Second, given our construction above, we find that one of ordinary skill in the art would have been led by Krouse and Kolling to the method of claim 1. When the teachings of Kolling and the teachings of Krouse are combined as discussed below, the result is nothing more than the predictable use of the elements of Kolling and Krouse according to their established functions.

The Supreme Court emphasized that “the principles laid down in *Graham* reaffirmed the ‘functional approach’ of *Hotchkiss*, 11 How. 248.” *KSR*, 550 U.S. at 415. (citing *Graham*, 383 U.S. at 12 (emphasis added)), and reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 401, 416. The operative question in this “functional approach” is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417.

Kolling’s invention is an ESP system (*i.e.* a bill presentment system). FF 1. The Appellants and the Examiner do not dispute that Kolling teaches a bill presentment system and the steps of claim 1 related to subscribing to the bill presentment system and to receiving electronic bills. *See* App. Br.

16 and 27-30 and Answer 3-5. Further, we note Kolling teaches that the ESP system can be used in conjunction with an existing electronic bill payment system. FF 1.

We also note that contrary to the Appellants' argument that Kolling "mandates" that all of the bills in the system be electronic (Reply Br. 8; *See also* App. Br. 16-17 and Reply Br. 2-5), Kolling implies that some customers wish to and still do receive paper bills. The Appellants argue that Kolling "mandates" that all of the bills be electronic bills because Kolling states that the ESP system replaces the mailing of paper statements with electronic delivery (FF 2 and 6). *Id.* However, Kolling states that the ESP system can be used "for those customers that wish electronic statements." FF 7. This implies that there are some customers who wish to receive paper bills and some that do not. Kolling also teaches that billers use legacy invoicing systems that allow bills to be printed or that a consumer's financial institution could print a statement for delivery. FF 3 and 8. Therefore, we find that Kolling teaches the claimed step of receiving at least one paper bill for said customer from at least one biller. We again note that claim 1 is silent as to who does the receiving and does not preclude a customer from receiving the bill.

We find that Kolling does not teach the claimed steps related to scanning the paper bill and processing the scanned image. FF 18.

Krouse describes an electronic bill payment system (*See* FF 9 and 10); such as the one Kolling teaches could be combined with their ESP system (FF 1). Krouse also describes a human operator receiving a paper bill and using its system to pay the bill. FF 10. We find that Krouse's bill payment

system performs the claimed steps related to processing the paper bill, specifically; scanning the paper bill to generate electronic image information (FF 11); identifying the contents of the paper bill (FF 12-14); extracting billing information from the electronic image information using a predefined template (FF 15 and 16); validating the extracted billing information (FF 17), and presenting the extracted billing information to the customer (FF 17). While Krouse teaches that the step of receiving a paper bill is performed by a customer and the other steps are performed by the bill payment system, we note again that claim 1 is silent as to who performs these steps and does not preclude a customer or a bill payment system from performing these steps.

We find that one of ordinary skill in the art would have been led by Kolling and Krouse to combine the ESP system of Kolling with the existing bill payment system of Krouse. Such a combination is nothing more than the combination of two known system with each performing the function that it has been known to perform. The combination yields a predictable result. We note that the Appellants have not submitted any evidence of secondary considerations. FF 20. “[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.” *KSR*, 550 U.S. at 416, (quoting *Sakraid v. Ag Pro, Inc.*, 425 U.S. 273, 282, 96 S.Ct. 1532 (1976)).

Accordingly, we find that one of ordinary skill in the art would have been led by Krouse and Kolling to the method of claim 1. Therefore, we shall sustain the rejection of claims 1-8.

*Claims 9-12*

The Appellants argued claims 9-12 as a group (App. Br. 14). We select claim 9 as the representative claim for this group, and the remaining claims 10-12 stand or fall with claim 9. 37 C.F.R. § 41.37(c)(1)(vii) (2009). The Appellants argue against the rejection of claim 9 for the same reasons used to argue against the rejection of claim 1. App. Br. 14-32 and Reply Br. 2-9. Accordingly, because we found them unpersuasive as to that rejection, we find them equally unpersuasive as to error in the rejection of claim 9. The rejection of claims 9-12 under 35 U.S.C. § 103(a) as being unpatentable over Kolling and Krouse is sustained. Again, for the reasons above, we articulate this rejection as a new ground of rejection.

*Claims 13-15*

The Appellants argued claims 13-15 as a group. App. Br. 14. We select claim 13 as the representative claim for this group, and the remaining claims 14 and 15 stand or fall with claim 13. 37 C.F.R. § 41.37(c)(1)(vii) (2009).

The Appellants argue against the rejection of claim 13 for the same reasons used to argue against the rejection of claims 1 and 9. App. Br. 14-32 and Reply Br. 2-9. Accordingly, because we found them unpersuasive as to those rejections, we find them equally unpersuasive as to error in the rejection of claim 13. The rejection of claims 13-15 under 35 U.S.C.

§ 103(a) as being unpatentable over Kolling and Krouse is sustained. Again, for the reasons above, we denominate this rejection as a new ground of rejection.

*Claims 16-30*

As further explained below, we will enter a new ground of rejection on claims 16-30 under 35 U.S.C. § 112, second paragraph, on the ground that claims 16-30 are indefinite. Therefore, the prior art rejection must fall because they are necessarily based on speculative assumption as to the meaning of the claim. *See In re Steele*, 305 F.2d 859, 862-63 (CCPA 1962).

NEW GROUND

Pursuant to 37 C.F.R. § 41.50(b), we enter a new ground of rejection on claims 16-30 under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

Taking claim 16 as representative, claim 16 includes limitations in means-plus-function format, including “means for receiving at least one paper based bill for said customer from at least one of said billers.”

35 U.S.C. 112, sixth paragraph:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

We cannot determine the structure that corresponds to the means for receiving at least one paper based bill. The Appellants state that the means for receiving paper based bills is the Bill Center 200 and point to step 410 of



Fig. 4 and page 18, lines 11-18 of the Specification. App. Br. 9. However, the Appellants point to the Bill Center 200 to correspond to all of the limitations of claim 16. *Id.* The Specification describes the Bill Center 200 as including server computers and other devices connected to a network (Specification 16:1-6), and the Specification describes these devices performing the other functions recited in claim 16. However, the Specification does not describe which structure performs the receiving function, but merely repeats the function; for example, see page 16, lines 8-9 or page 17, line 9. We note that on page 18, lines 11-14, cited by the Appellants, the Specification states “[t]he operation of receiving and processing paper bills is shown in flowchart of Fig. 4. When paper bills 340 are received at Bill Center 200, they are counted and separated, at step 410. This may be done either by a Paytrust employee or through the use of an envelope jogger.” Further, we note that step 410 in Fig. 4 includes receiving paper bills, but also describes counting, separating, and opening the paper bills.

Since we cannot determine the corresponding structure of the means for receiving paper bills in the Specification, we cannot determine the scope of the claims. We find claim 16 indefinite. We note that independent claims 24 and 28 recite a similar limitation. Accordingly, claims 16, 24, and 28, and claims 17-23, 25-27, 29 and 30, dependent thereon, are rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

### CONCLUSIONS OF LAW

We conclude that the Appellants have not shown that the Examiner erred in rejecting claims 1-15. We conclude that the Examiner erred in rejecting claims 16-30. We enter a new ground of rejection on claims 1-30.

### DECISION

The decision of the Examiner to reject claims 1-15 is affirmed and to reject claims 16-30 is reversed. We enter a new ground of rejection on claims 1-30.

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides “[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review.”

37 C.F.R. § 41.50(b) also provides that the appellants, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner . . . .
- (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record . . . .

AFFIRMED-IN-PART; 37 C.F.R. § 41.50(b)

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